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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/880,931	06/15/2001	Yasuhiro Gotou	Q64900	5681

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EXAMINER	
BARAN, MARY C	

ART UNIT	PAPER NUMBER
2857	

DATE MAILED: 05/17/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/880,931	GOTOU ET AL.	
	Examin r	Art Unit	
	Mary Kate B Baran	2857	

-- The MAILING DATE of this communication appears on the cover sheet with th correspondenc address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *05 March 2004*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,3-16,19-25 and 27-48* is/are pending in the application.

4a) Of the above claim(s) *17 and 18* is/are withdrawn from consideration.

5)☒ Claim(s) *19-25 and 27-48* is/are allowed.

6)☒ Claim(s) *1,5-9 and 13-16* is/are rejected.

7)☒ Claim(s) *3,4 and 10-12* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *05 March 2004* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

1. The action is responsive to the Amendment filed on 05 March 2004. Claims 1, 3-16, 19-25, and 27-48 are pending. Claims 1, 3-16, 19-25, and 27-47 have been amended. Claims 2 and 26 have been cancelled. Claim 48 is new.

2. The amendments filed 05 March 2004 are sufficient to overcome the prior 35 U.S.C. 112 second paragraph rejections and objections to the specification.

Specification

3. The disclosure is objected to because of the following informalities:

(a) On page 4 [0019] line 2, "sensor cable that is sheath having a water proof" should be – sensor cable that is water proof –.

(b) On page 5 [0022] line 4, "whereas and in" should be – whereas in –.

(c) On page 11 [0044] line 14, "determining units 4. and the" should be – determining units 4. The –.

(d) On page 13 [0050] line 1, "determining unit" should be – determining units –.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 5-9 and 13-16 are rejected under 35 U.S.C. 102(e) as being anticipated by Quist et al. (U.S. Patent No. 6,199,018) (hereinafter Quist).

Referring to claim 1, Quist teaches a machine component monitoring system monitoring machine components used in a machine system, a plurality of machine components each having rolling elements (see Quist, column 3 lines 29-33), said machine component monitoring system comprising: a control unit (see Quist, column 4 lines 5-11); a plurality of determining units (see Quist, Figure 1) electrically connected, respectively, with a plurality of sensors (see Quist, Figure 2B and column 9 lines 7-10), said determining units being electrically connected with the control unit (see Quist, column 4 lines 12-15), each of the sensors being arranged on the respective machine component and detecting an influence signal induced in the machine component and resulting from passage of the rolling elements (see Quist, column 3 lines 29-33), each of the determining units determining, according to a predetermined process set-up condition, a status of the respective machine component, said status being at least one of (see Quist, column 6 lines 7-15) presence of an abnormality, absence of an abnormality (see Quist, column 8 lines 55-59) and lifetime (see Quist, column 5 lines 7-10) of the respective machine component in reference to an output signal from the respective sensor (see Quist, column 8 lines 55-59); and said control unit collecting

results of determination performed by each of the determining units (see Quist, column 4 lines 15-17), wherein when determining the status, each determining unit determines one of a presence of an abnormality and an absence of an abnormality (see Quist, column 18 lines 61-67) in a sensor waveform (see Quist, column 20 lines 12-18), which is the output signal from the associated sensor (see Quist, column 21 lines 19-26).

Referring to claim 5, Quist teaches that each of the determining units detects one of a presence and an absence of a determiner abnormality, which is an abnormality resulting from the respecting determining unit itself, and a sensor waveform abnormality resulting from the sensor waveform (see Quist, column 4 lines 22-40).

Referring to claim 6, Quist teaches that the control unit makes a transmission request sequentially to the determining units, and each determining unit transmits a result of determination to the control unit in response to the transmission request (see Quist, column 4 lines 15-17).

Referring to claim 7, Quist teaches that the control unit commands setting and changing of the process set-up condition for each determining units, and each determining unit changes the process set-up condition according to the command from the control unit (see Quist, column 4 lines 41-55).

Referring to claims 8 and 9, Quist teaches that each determining unit has a plurality of waveform processing units processing the waveform according to different waveform processing techniques, selects one of the waveform processing units that is to be used for processing the sensor waveform, and the control unit applies a selection command necessary to select one of the waveform processing unit for the particular determining unit or for each of the sensors (see Quist, column 21 lines 40-58, column 23 lines 36-53 and column 30 lines 3-9).

Referring to claim 13, Quist teaches that the control unit has an automatic monitoring mode in which a result of determination performed by each of the determining units is acquired by sequentially issuing a transmission request to request the respective determining unit to send the result of determination (see Quist, column 4 line 64 – column 5 line 3) and the terminal operated mode in which a transmission request is made to request the respective determining unit to send the result of determination and information other than the result of determination, a response thereto is acquired (see Quist, column 5 lines 10-15).

Referring to claim 14, Quist teaches that each determining unit captures as digital data the waveform which is output from each sensor connected therewith (see Quist, column 14 line 64 – column 15 line 6), and the control unit includes a waveform data storage unit storing the digital data captured by each determining unit (see Quist, column 16 lines 23-31).

Referring to claim 15, Quist teaches a maintenance information generating unit for generating predetermined maintenance information associated with the machine component, based on a result of determination performed by each determining unit (see Quist, column 5 lines 7-10).

Referring to claim 16, Quist further teaches information processing unit positioned at a location remote from the control unit and connected to the control unit through a communication network (see Quist, column 4 lines 12-15), wherein the control unit collects not only a result of determination performed by each determining unit (see Quist, column 3 lines 49-56), but also a sensor waveform input to each determining unit, said information processing unit including a remote data collecting unit for collecting the result of determination and the sensor waveform that the control unit has collected from each determining unit (see Quist, column 4 lines 15-17).

Allowable Subject Matter

5. Claims 3, 4 and 10-12 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

6. Claims 19-25 and 27-48 are allowed.

7. The following is a statement of reasons for the indication of allowable subject matter:

Claims 19-25 and 27-29 are allowable over the prior art because a machine component monitoring and diagnosing system which comprises a diagnosing unit which includes an examining section to automatically determine, when the sensor information is inputted, whether at least the machine component is properly usable, and a manual diagnosing section to at least one of add a result of diagnosis performed by a person to the result of diagnosis performed by the examining section, and modify the result of diagnosis performed by the examining section based on the result of diagnosis performed by the person, is not found, taught or suggested in the prior art of record.

Claims 30-48 are allowable over the prior art because a machine component monitoring, diagnosing, and selling system which comprises a merchandise information adding unit generating merchandise information associated with the diagnosed machine component in accordance with diagnosis result information of the diagnosing unit and adding this merchandise information to the diagnosis result information; and a diagnosis result information transmitting unit transmitting to the line merchandise information added diagnosis result information, which is the diagnosis result information added with the merchandise information is not found, taught or suggested in the prior art of record.

Response to Arguments

8. Applicant's arguments filed 05 March 2004 have been fully considered but they are not persuasive.

Applicant argues that Quist et al. (U.S. Patent No. 6,199,018) (hereinafter Quist) does not teach "each of the determining units determining a status of the respective machine component wherein when determining the status, each determining unit determines one of a presence of an abnormality and an absence of an abnormality in a sensor waveform, which is the output signal from the associated sensor"; however, this is not the case. Quist does teach determining units determining a status of the respective machine component (see Quist, column 3 lines 27-33) wherein when determining the status, each determining unit determines one of a presence of an abnormality and an absence of an abnormality in a sensor waveform (see Quist, column 16 lines 10-15), which is the output signal from the associated sensor (see Quist, column 14 lines 1-28). Therefore, the Examiner maintains the rejection, and claims 1, 5-9 and 13-16 stand rejected under Quist.

Conclusion

9. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mary Kate B Baran whose telephone number is (571) 272-2211. The examiner can normally be reached on Monday - Friday from 8:00 am to 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marc S Hoff can be reached on (571) 272-2216. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

12 May 2004

MARC S. HOFF
SUPERVISORY PATENT EXAMINER
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